

Claims

1. (Amended) An insulin pump for use in conjunction with a mobile communication terminal capable of measuring a blood glucose level, comprising:

5           an external input port connected to the mobile communication terminal, which is capable of measuring a blood glucose level and transmitting information on the measured blood glucose level to a glucose management server, to receive information on amounts of insulin to be  
10        injected, which corresponds to the information on measured glucose levels, from the mobile communication terminal;

          an output port for outputting information on amounts of insulin actually injected to a user;

          memory for storing the information on the amounts of  
15        insulin actually injected;

          a key input unit for inputting status before and after each meal and before retiring in electrical signal form;

          a control unit for extracting the information on the  
20        amounts of insulin to be injected from the memory in response to a key signal of the key input unit, and generating control code according to the information on the amounts of insulin to be injected; and

          a motor drive for operating a soft motor to supply  
25        insulin in response to the control code;

          wherein the control unit is operated in conjunction

with a Liquid Crystal Display (LCD) panel for accumulating the information on the amounts of insulin injected for a predetermined period and displaying the accumulated information on the amounts of insulin injected in graphic  
5 form, and a driver for operating the LCD panel, and accumulates the information on the measured blood glucose levels for a predetermined period, and displays the accumulated information on the measured blood glucose levels on the LCD panel with respect to a plurality of time  
10 bands and dates; and

wherein the key input unit includes an automatic setting mode for automatically injecting insulin and a time input mode for setting time when insulin is to be injected, and, when the automatic setting mode is selected, the  
15 control unit controls the motor driver based on time information that is input from an internal timer and the set time when insulin is to be injected.

2. The insulin pump according to claim 1, wherein the  
20 external input port and the output port are Universal Serial Bus (USB) ports.

3. The insulin pump according to claim 1, wherein the external input port is an infrared port.

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## 5. (Delete)

6. The insulin pump according to claim 1, wherein the mobile communication terminal provides information on an amount of food eaten by the user to the blood glucose management server in coded signal form, and the information  
5 on the amounts of insulin injected is processed according to the information on the amount of food eaten.

## 7. (Delete)

8. (Amended) A network system for transmitting  
10 control information for an insulin pump for use in conjunction with a mobile communication terminal capable of measuring a blood glucose level, comprising:

a DB for storing information on amounts of insulin injected that corresponds to information on measured blood  
15 glucose levels, an amount of food eaten and an amount of exercise taken;

a blood glucose management server for receiving the information on the blood glucose levels that are measured  
20 by the mobile communication terminal, and the information on the amount of food eaten and the amount of exercise taken that is input via the mobile communication terminal, extracting information on amounts of insulin to be injected that corresponds to the information on the measured blood

glucose levels, the amount of food eaten and the amount of exercise taken and generating transmitter information of the mobile communication terminal; and

5 a communication server for converting the information on the amounts of insulin to be injected into coded information on the amounts of insulin to be injected, and transmitting the coded information on the amounts of insulin to be injected to the mobile communication terminal that corresponds to the transmitter information; and

10 wherein the coded information on the amounts of insulin to be injected corresponds to amounts of insulin to be injected before and after breakfast, before and after lunch, before and after dinner and before retiring, and is information on operational control of the insulin pump that  
15 corresponds to amounts of insulin to be injected with respect to insulin injection time bands.

9. The network system according to claim 8, wherein the information on the amounts of insulin injected stored  
20 in the DB is classified according to clinical histories of diabetes patients, and the blood glucose management server extracts the information on the amounts of insulin to be injected from the DB with respect to each diabetes patient based on the transmitter information of the mobile  
25 communication terminal.

10. The network system according to claim 8, wherein

the communication server transmits the coded information on the amounts of insulin to be injected in short message form, in conjunction with a Short Message Service (SMS) system.

5           11. (Delete)

12. The network system according to claim 8, wherein the mobile communication terminal is one of a mobile phone, a Personal Digital Assistant (PDA) and a Personal Computer (PC) equipped with a wireless modem, which are capable of  
10   wirelessly accessing an Internet.